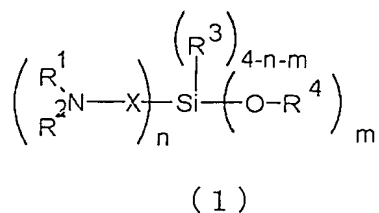


WHAT IS CLAIMED IS:

1. A coating liquid for forming insulating film comprising (A) and (B), wherein a water content in the coating liquid is not more than 1% by weight:

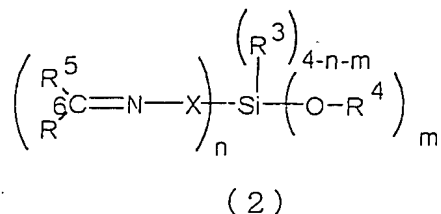
(A): a heat-reactive nonpolar compound or polymer thereof, wherein the heat-reactive nonpolar compound is selected from the group consisting of a compound having less than two carbon-carbon double bonds, a compound having not less than two carbon-carbon triple bonds, and a compound having at least one carbon-carbon double bond and at least one carbon-carbon triple bond,

(B): at least one compound selected from the group consisting of silane compounds represented by following formulae (1) to (3):

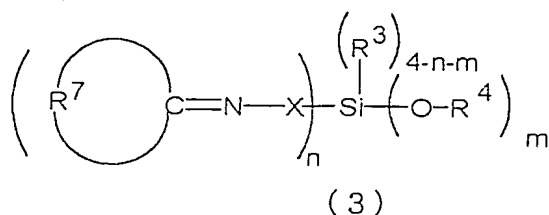


(wherein,  $R^1$  and  $R^2$  independently represent hydrogen atoms, alkyl group having 1 to 4 carbon atoms or aryl group having 6 to 20 carbon atoms,  $R^3$  represents alkyl group having 1 to 4 carbon atoms or aryl group that may be substituted with alkyl group having 1 to 3 carbon atoms,  $R^4$  represents alkyl group having 1 to 4 carbon atoms, acyl group having 1 to 4 carbon atoms or

aryl group having 6 to 20 carbon atoms, X represents bivalent group, n and m is integers of from 1 to 3, providing that n+m is not more than 4),

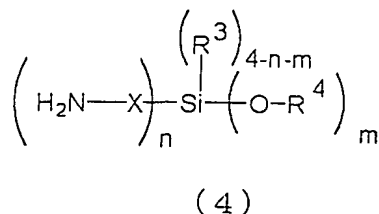


(wherein,  $R^3$ ,  $R^4$ , n and m are as defined above,  $R^5$  and  $R^6$  independently represent hydrogen atom or monovalent organic group, providing that both  $R^5$  and  $R^6$  are not hydrogen atoms), and



(wherein,  $R^3$ ,  $R^4$ , n and m are as defined above,  $R^7$  represents alkylene group having 3 to 8 carbon atoms).

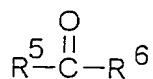
2. A coating liquid according to claim 1, wherein the compound of formula (1) is a compound of formula (4):



(R<sup>3</sup>, R<sup>4</sup>, n and m are as defined above).

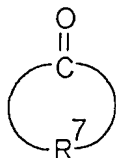
3. A coating liquid according to claim 1 or 2, wherein the compound of formula (4) is at least one selected from the group consisting of 2-aminoethyltrimethoxysilane, 2-aminoethyltriethoxysilane, 3-aminopropyltrimethoxysilane, 3-aminopropyltriethoxysilane, 2-aminoethyltriacetoxysilane, 3-aminopropyltriacetoxysilane.

4. A coating liquid according to claim 1, wherein a compound of formula (2) or formula (3) is obtained by condensation of the compound of formula (4) with a compound of formula (5) or formula (6):



(5)

(wherein, R<sup>5</sup> and R<sup>6</sup> are as defined above), and



(6)

(wherein, R<sup>7</sup> is as defined above).

5. A coating liquid according to claim 4, wherein the

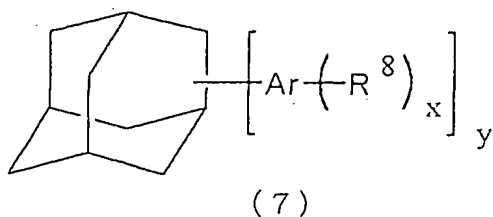
compound of formula (5) or formula (6) is a compound with boiling point not more than 250°C under atmospheric pressure.

6. A coating liquid according to claim 4, wherein the compound of formula (5) is at least one selected from the group consisting of methylethylketone, 2-butanone, 2-pentanone, 3-pentanone, methylbutylketone, methylisobutylketone, 2-heptanone, 3-heptanone, acetylacetone.

7. The coating liquid according to claim 1, wherein the amount of (B) is from 0.01 to 10% by weight to (A).

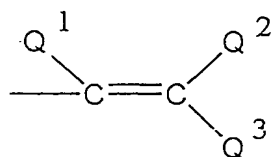
8. A coating liquid according to claim 1, wherein (A) is a heat-reactive nonpolar compound having adamantane skeleton or a polymer of the heat-reactive nonpolar compound having adamantane skeleton.

9. A coating liquid according to claim 8, wherein (A) is a compound of formula (7) or a polymer of the compound of formula (7):



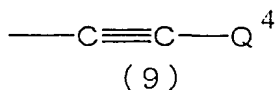
(wherein, Ar represents a group having an aromatic ring,  $\text{R}^8$

represents a group represented by formula (8) or formula (9),  
 x represents an integer of from 1 to 3, wherein, when x is not  
 less than 2, R<sup>8</sup> may be same or different, y represents an integer  
 of from 1 to 3, wherein, when y is not less than 2, Ar and R<sup>8</sup>  
 may be same or different, x × y is an integer of from 2 to 9),



(8)

(wherein, each of Q<sup>1</sup> to Q<sup>3</sup> independently represents hydrogen  
 atom, alkyl group having 1 to 4 carbon atoms, alkenyl group having  
 2 to 4 carbon atoms, alkynyl group having 2 to 4 carbon atoms,  
 or phenyl group), and



(wherein, Q<sup>4</sup> represents hydrogen atom, alkyl group having 1 to  
 4 carbon atoms, alkenyl group having 2 to 4 carbon atoms, alkynyl  
 group having 2 to 4 carbon atoms, or phenyl group).

10. A coating liquid according to claim 9, wherein the  
 compound of formula (7) is a compound having Ar that bonds to  
 methine group of adamantane skeleton.

11. A coating liquid according to claim 9 or 10, wherein

R<sup>8</sup> is a group of formula (9).

12. A coating liquid according to claim 9, wherein R<sup>8</sup> is ethynyl group or phenylethynyl group.

13. A method for forming an insulating film comprising coating a substrate with the coating liquid according to claim 1, baking at 80 to 250°C under atmospheric pressure in air, and heat-curing at 250 to 400°C.

14. An insulating film obtained by the method for forming according to claim 13.